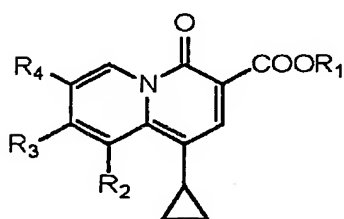


Abstract

The present invention provides a 4-oxoquinolizine antibacterial agent having a 2-pyridone skeleton as a partial structure and also having a strong antibacterial effect on gram-positive bacteria, gram-negative bacteria or anaerobic bacteria. The compound having the following formula (I) or a pharmaceutically acceptable salt thereof:



(I)

wherein:

R_1 represents hydrogen atom or a carboxyl-protecting group,

R_2 represents hydrogen atom, a halogen atom, a lower alkyl group, a lower alkoxy group or hydroxyl group,

R_3 represents phenyl group or an aromatic substituent selected from the group consisting of 5-membered and 6-membered heterocyclic groups and R_3 has a substituent selected from the group consisting of a hydrogen atom, a lower alkyl group, a lower alkoxy group, a nitro group, a cyano group, an amino group, an acyl group, a carbamoyl group and a ureido group, and

R_4 represents a hydrogen atom or a halogen atom.